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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/898,250	07/03/2001	Igor Anatolievich Abrosimov	2877/1J578-US1	6289
7590 03/25/2004				
DARBY & DARBY P.C. 805 Third Avenue New York, NY 10022			EXAMINER VO, HIEN XUAN	
			ART UNIT 2863	PAPER NUMBER

DATE MAILED: 03/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/898,250	ABROSIMOV ET AL.	
	Examiner	Art Unit	
	Hien X. Vo	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☒ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-51 is/are allowed.
- 6) ☐ Claim(s) ____ is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>10/03/01, 06/12/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The information disclosure statement (IDS) submitted on 10/03/2001. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

Drawings

2. New corrected drawings are required in this application because the Figs. 7a-7c, and 10a have been cited in the background of the invention (see specification, pages 3, and 6) so they must be labeled as a prior art. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

Specification

3. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The

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abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

4. The abstract of the disclosure is objected to because it contents the form and legal phraseology often used in patent claims, such as "timing control means" (line 3), "A means for the compensation" (line 4), "said register" (lines 7-8 and 10), "a means for detecting" (line 9) and the abstract is not in single paragraph. Correction is required. See MPEP § 608.01(b).

Allowable Subject Matter

5. Claims 1-51 are allowable over the prior art of record.

The following is an Examiner's statement of reasons for the indication of allowable subject matter:

For claims 1, 3, 15, 22, 26, 40, 42, 43, 47, the prior art disclose some claimed limitations. For example, Lueker et al. (U.S. Patent No. 5,430,660) disclose a digital pulse generator includes the output of the oscillator is used to produce output pulses whose edge locations are then adjusted by small digital increments or "slivers" and very small analogue increments or "verniers". The RAM contents are converted to a serial bit stream that controls the coarse pulse width and period as an integral number of top octave periods, or quanta. However, this method of skew control is not automatic and

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requires an operator to disconnect the generator from the working circuit and connect an output of the generator to a calibration input in order to accomplish the calibration. Alfke (U.S. Patent No. 6,002,282) disclose a feedback apparatus for adjusting clock delay includes a closed-loop clock delay adjustment system compensates the difference between the delay introduced by on-chip clock buffers and delays inserted at the device data input pins. By measuring the actual real time drift, the clock buffer delay is adjusted to minimise the input set-up time without additional requirements to hold time. However, the prior art does not teach singularly or in combination a timing control device for compensation of timing errors in multiple channel devices comprising: at least one register a corresponding feedback loop associated for the relative alignment of register's channel timing in relation to the reference signal, a means for detecting a deviation from a predetermined level of probability of reading by the register symbol on a boundary of two reference channel symbols in a sequence of symbols transmitted through the reference channel, a set of delay means which uses the determined information on deviation from the predetermined level of the probability to generate a feedback signal to compensate timing errors in the register, a modulator signal applied to the reference signal for obviating the timing hysteresis within the register.

6. This application is in condition for allowance except for the following formal matters:

The paragraphs 2-4 .

Prosecution on the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.


A shortened statutory period for reply to this action is set to expire **TWO MONTHS** from the mailing date of this letter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien X. Vo whose telephone number is (571) 272-2282. The examiner can normally be reached on M-F (8:00-5:30) First Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached on (571) 272-2269. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hien Vo
March 18, 2004



John Barlow
Supervisory Patent Examiner
Technology Center 2800